

Work Order ID 81732

81732

Page 1

March-19-12 8:45:15 AM

Item ID: D4101-3

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Step

Start Date: 29/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 29/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/03/19 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4101	B								
100	Cut blanks as per folio	0.00							
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	3.85" LONG								
110		0.00							
110									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Mill as per dwg and Folio FA946								
	DEBURR								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

4T 12-03-28

6 0 12/03/29

6 0 12/03/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Quality Control

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Page 3

March-19-12 8:45:15 AM

Item ID: D4101-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Step

Start Date: 29/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 29/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

Identify as per dwg & Stock Location: ST/12/

0.00

160

Packaging

Memo

0.00

Packaging

(OK) SP12-0330

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.00

Quality Control

12/4/12

R12-03-30

Dart Aerospace Ltd

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NOTE: Date & initial all entries

Picklist Print

March-19-12 8:45:20 AM

Page 1

Work Order ID: 81732

81732

Parent Item: D4101-3

D4101-3

Parent Item Name: Step

Start Date: 29/03/2012

Required Date: 29/03/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: EST REV:A NEW ISSUE

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.250X04.50 0		Purchased	No			100	f	6.2417	0.33	2.084211			

M6061T6B1 250X04 500

6061-T6 Bar 1.25 X 4.50

**

25 12-03-28

Location

Loc Qty

Loc Code

MAT004

6.2417

112628

0.7417

119230

5.5

2.084211

Dart Aerospace Ltd

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DART AEROSPACE LTD		Work Order:	81732
Description: Step		Part Number:	D4101-3
Inspection Dwg: D4101	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.030 deep	+/-0.010	0.030	✓		SLO8	Vern
R0.06	+/-0.030	R.060	✓		Rad gauge	
0.25	+/-0.030	0.247	✓		SLO8	Vern
4.00	+/-0.030	3.9995	✓			
2.60	+/-0.030	2.600	✓			
1.05	+/-0.030	1.0465	✓			
1.53	+/-0.030	1.522	✓			
0.950 +0.015/-0.010	+0.015/-0.010	0.959	✓			
0.25	+/-0.030	0.250	✓			
0.25	+/-0.030	0.258	✓			
0.07 x 45°	+/-0.030 x 0.5°	0.075 x 45°	✓			
Ø0.257	+0.006/-0.001	0.2585	✓			
0.300 +0.015/-0.010	+0.015/-0.010	0.293	✓			
R0.06	+/-0.030	R.060	✓		Rad gauge	
0.60	+/-0.030	0.594	✓		SLO8	Vern
0.270 +0.015/-0.010	+0.015/-0.010	0.257	✓			
0.610	+/-0.010	0.609	✓			
0.65	+/-0.030	0.654	✓			
0.17	+/-0.030	0.173	✓			
0.25	+/-0.030	0.247	✓			
0.13 x 45°	+/-0.030 x 0.5°	0.125 x 45°	✓			
9°	+/-0.5°	9°	✓			
0.75	+/-0.030	0.748	✓			
0.10	+/-0.030	0.105	✓			
0.86	+/-0.030	0.863	✓			
R0.25	+/-0.030	R.250	✓		Rad gauge	
0.13	+/-0.030	0.128	✓		SLO8	Vern
2.35	+/-0.030	2.345	✓			
1.15	+/-0.030	1.140	✓			

Measured by: <i>JS</i>	Audited by: <i>JS</i>	Preliminary Approval:
Date: 12/03/29	Date: 12/03/29	Date:

Rev	Date	Change	Revised by	Approved
A	11.10.13	New Issue	KJ	<i>JS</i>

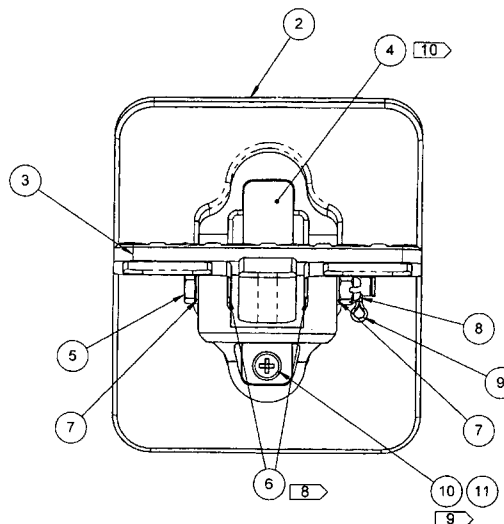
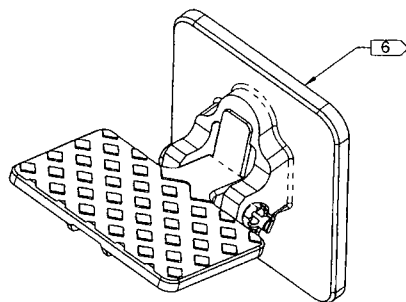
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D4101-041 PRE-FLIGHT STEP ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4101-041" USING FINE POINT PERMANENT INK MARKER BACK SURFACE
- 7) WEIGHT: 1.18 lbs
- 8) INSTALL NAS1149D0432J WASHER IN BETWEEN STEP AND BRACKET MATING FACES
- 9) TORQUE AN525832R SCREW TO 15-25 in-lb
- 10) TEXTURED SIDE TO BOTTOM

ITEM	QTY	PART NUMBER	DESCRIPTION
1	X	D4101-041	PRE-FLIGHT STEP ASSEMBLY
2	1	D4101-1	BRACKET
3	1	D4101-3	STEP
4	1	D4101-5	SPRING
5	1	AN4-22	BOLT
6	2	NAS1149D0432J	WASHER
7	2	NAS1149D0463J	WASHER
8	1	AN310-4	NUT
9	1	MS24665-136	COTTER PIN
10	1	AN525-832R6	SCREW
11	1	MS21209C0815	HELICOIL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 81732 MLJ
12/03/19

RELEASED
2010-08-23

B	NAS1149D0432J WAS NAS1149D0416J (ZN D3-1); ADD SCREW AND HELICOIL (ZN D3-1& B1-3); RE-DESIGN D4101-5 (ZN B4-5)	RF	10.08.05
A	NEW ISSUE	RF	10.07.12
REV	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF		
DATE	10.08.05		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4101** REV. B
SHEET 1 OF 5
TITLE **PRE-FLIGHT STEP ASSEMBLY** SCALE NTS

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NOTE: Date & initial all entries

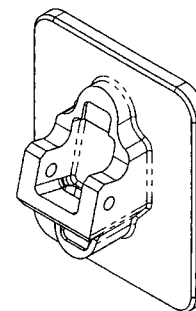
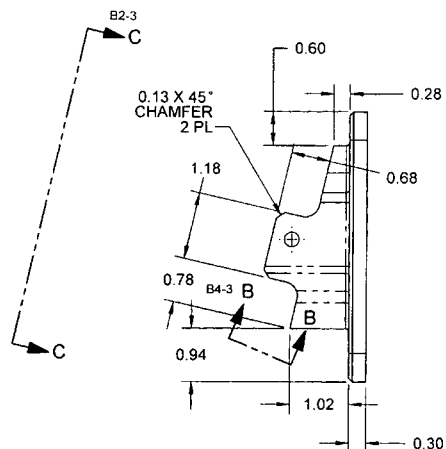
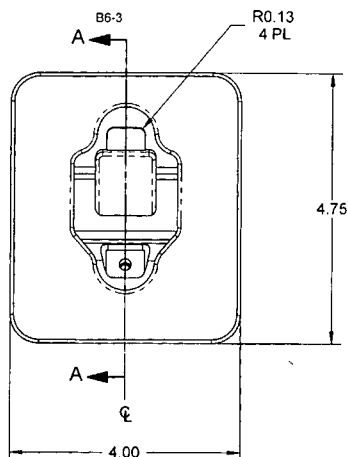
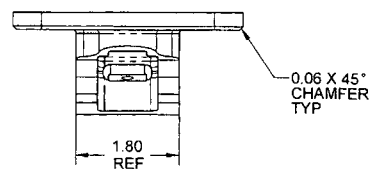
8 7 6 5 4 3 2 1

D

C

B

A



81732

D

C

B

A

D4101-1 BRACKET

RELEASED
2010-08-23

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.85 lbs

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CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4101	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	PRE-FLIGHT STEP ASSEMBLY	NTS
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8 7 6 5 4 3 2 1

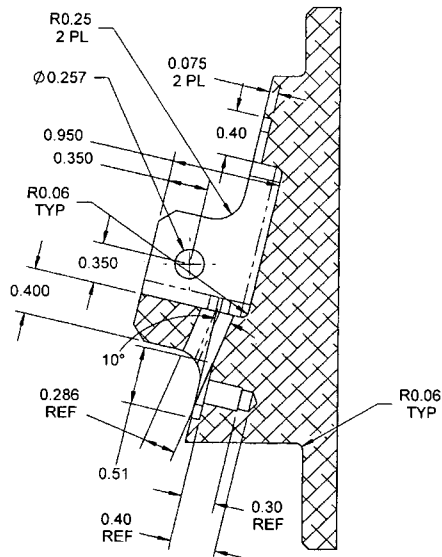
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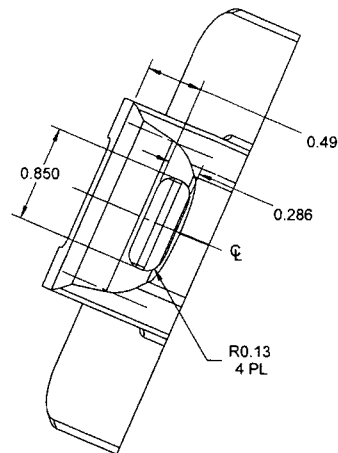
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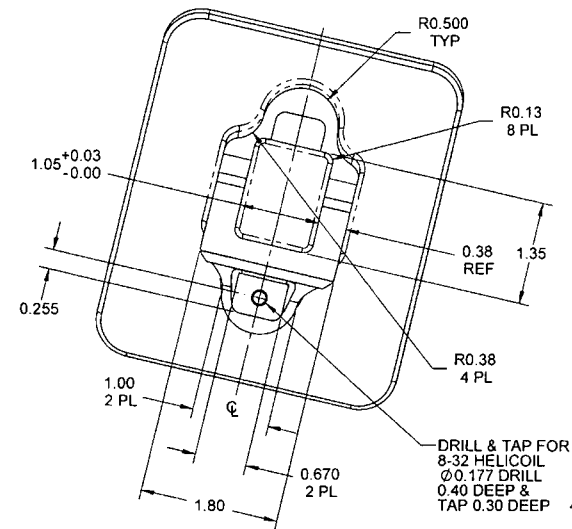
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SECTION A-A C7-2
SCALE 2X



VIEW B-B C4-2
SCALE 2X



VIEW C-C D4-2
SCALE X1.5

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2010-08-23

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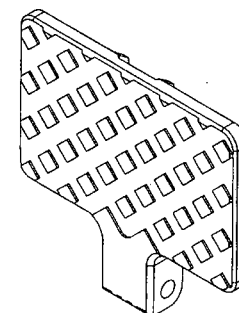
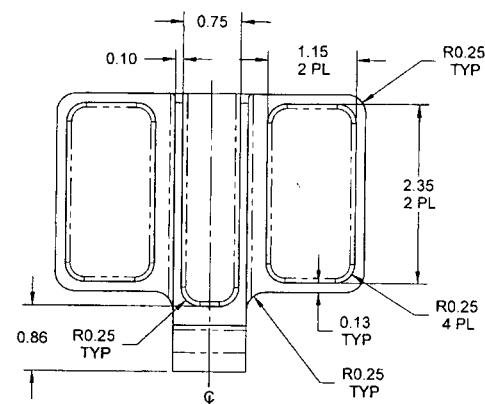
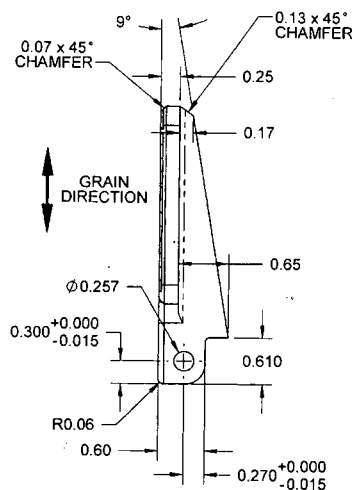
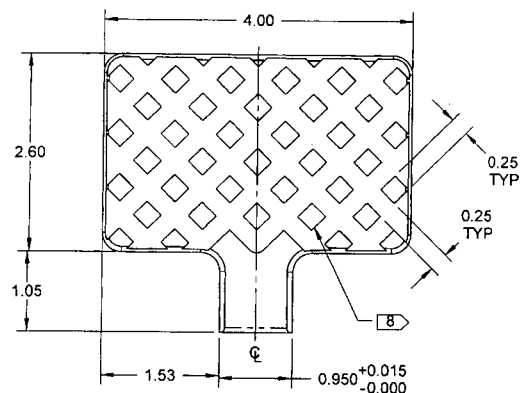
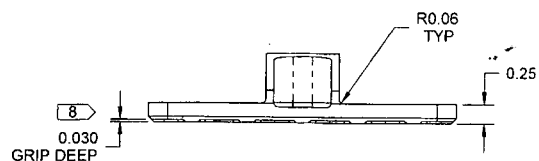
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81732

D4101-3 STEP

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2010-08-23

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.27 lbs
- 8) MACHINE 0.25 x 0.25 GRIP 0.030 DEEP AT 45° PATTERN 0.25 APART

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MFG. APPR.	RF	D4101	SHEET 4 OF 5
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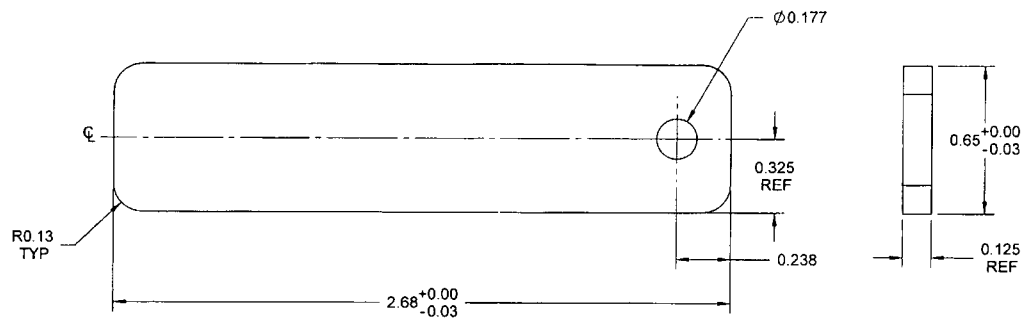
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81732

D4101-5 SPRING



RELEASED
2010-08-23

AWD

NOTES:

- 1) MATERIAL: F60029-GY3778 DARK GREY LEXAN SHEET (HEAVY HAIRCELL TEXTURE) 0.125 THICK
REF DART SPEC MLEXS.125-F60029-04
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.01 lbs

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